

MARKED - UP COPY

## ANGLED GRIPPING JOINT COMBINATION FOR SUPPORT STRUCTURES

OIP  
MAY 14 2002  
CLAIMS

I claim:

1. An angled gripping joint combination for support structures, comprising a U-beam top joint with lumber end gripping means gripper and a U-beam splay bar for use with a pair of lumber legs and a lumber cross-beam, the U-beam top joint having a side U-beam and a side flat bracket beam joining a pair of spaced inward facing end brackets, ~~each such bracket in conjunction with each, each such spaced inward facing end bracket together with a portion of the side U-beam and a portion of the side bracket beam being adapted to abut three sides of a lumber leg while allowing a fourth side of the lumber leg free to pivot away from the bracket until pressing a top edge of the fourth side against the lumber cross-beam when the lumber cross-beam is positioned on the side beams, each such bracket having an inward facing lumber leg pivot surface that is at an obtuse angle with respect to a top surface of the side bracket beams, the U-beam splay bar having at each end thereof a spaced pair of outward facing end brackets, each having an outward facing lumber~~

RECEIVED

MAY 16 2002

OFFICE OF PETITIONS

leg guiding surface that is fixed with respect to the bar at  
a like obtuse angle to that of the inward facing ~~tumbler leg~~  
~~pivot surface~~ end bracket with respect to the top surface of the side  
bracket beams.

~~21630~~. The angled gripping joint combination of Claim ~~1529~~, in which there are side  
enclosing brackets affixed to the side beam of the U-beam  
top joint.

~~331~~. The angled gripping joint combination of Claim ~~1529~~, in which there are side  
enclosing brackets affixed to a side of the U-beam splay  
bar.

~~41832~~. The angled gripping joint combination of Claim ~~1529~~, in which there are side  
enclosing brackets affixed to the side beam of the U-beam  
top joint and side enclosing brackets affixed to a side of  
the U-beam splay bar.

~~51933~~. The angled gripping joint combination of Claim ~~41832~~, in which the outward facing  
brackets each have a pair of parallel flanks extending  
perpendicular along one flank each on opposite sides of each of and extending perpendicular to  
the outward

facing lumber leg guiding surfaces.

~~62034~~. The angled gripping joint combination of Claim ~~51933~~, in which the parallel flanks have holes through which a retaining nail could be inserted into a lumber leg.

~~72135~~. ~~FA sawhorse combination comprising assembly including a pair of the angled gripping joint combination of Claim 6, comprising a second combination of the U-beam top joint with lumber end gripping means and the U-beam splay bar~~~~2034~~, a lumber cross-beam, and four lumber legs.

~~92336~~. The combination of ~~two sets~~ a pair of the sawhorse joint combination assemblies of Claim ~~72135~~, in which two of the four top joints have a support ledge formed by a U-beam to which a chopsaw base can be bolted.

~~1137~~. ~~The sawhorse assembly of of Claim 735, comprising additionally a set of four longer legs of lumber, 12 four additional lumber legs, each additional lumber leg being longer than each of the four lumber legs.~~

~~1338~~. ~~FA pair of the sawhorse assemblies of Claim 735, aligned width-wise and joined by lumber lengths~~

inserted perpendicular to the lumber cross-beams through  
aligned side enclosing brackets on the respective sets.

~~142839. The~~ A combination of multiple sets of Claim 7, in which a  
in which a multiplicity of the angled gripping joint combination of Claim 2435, form a bench and  
table structure ~~is formed by~~ with lumber lengths  
inserted through side enclosing brackets affixed to side  
beams of U-beam top joints of at least one bench structure  
and inserted through side enclosing brackets affixed to  
sides of U-beam splay bars of at least one table structure  
aligned therewith.